

Supplier Name: Texas Instruments Inc. (DUNSH 00-732-1904)
 Contact Info: ti.com/support
 Form/Declaration Type: Distribute - RoHS and IEC 62474 DB
 Created on: 06/06/2022

Details for "SN74LVC04APWRE4"

Current Product Information

TI part number	Lead finish/Ball material	MSL rating/peak reflow	Assembly site	Package Pins	Package body size (mm)	Total device mass (mg)*
SN74LVC04APWRE4	NIPDAU	Level-1-260C-UNLIM	TI MALAYSIA A/T	PW 14	4.4x5x1.15	81.2

*Total Device Mass

The summary mass is a rounded value and will be within approximately +/- 10% of the detailed mass value.

Environmental Ratings Information

RoHS	REACH	Green	IEC 62474 DB
Yes	Yes	Yes	Yes

Component Information

Component	Substance	CAS Number	Amount (mg)	Homogeneous Material Level		Component Level	
				Percentage %	ppm	Percentage %	ppm
Bond Wire							
Copper and Its Alloys	Copper	7440-50-8	0.068969	99.99855	999986	0.084903	849
Precious Metals	Silver	7440-22-4	0.000001	0.00145	14	0.000001	0
Sub-Total			0.06897	100	1000000	0.084904	849
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.116422	79.999725	799997	0.143318	1433
Thermoplastics	Epoxy	85954-11-6	0.029106	20.000275	200003	0.03583	358
Sub-Total			0.145528	100	1000000	0.179149	1791
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	42.3138	97.040296	970403	52.089329	520893
Copper and Its Alloys	Iron	7439-89-6	1.1336	2.59974	25997	1.395489	13955
Copper and Its Alloys	Phosphorus	7723-14-0	0.0654	0.149985	1500	0.080509	805
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.00436	0.009999	100	0.005367	54
Zinc and Its Alloys	Zinc	7440-66-6	0.0872	0.19998	2000	0.107345	1073
Sub-Total			43.60436	100	1000000	53.67804	536780
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.022446	95.11823	951182	0.027632	276
Precious Metals	Gold	7440-57-5	0.000184	0.779727	7797	0.000227	2
Precious Metals	Palladium	7440-05-3	0.000968	4.102043	41020	0.001192	12
Sub-Total			0.023598	100	1000000	0.02905	290
Mold Compound							
Other Inorganic Materials	Silica	7631-86-9	31.377237	84.999999	850000	38.626151	386262
Other Plastics and Rubber	Carbon Black	1333-86-4	0.184572	0.5	5000	0.227213	2272
Thermoplastics	Epoxy	85954-11-6	5.352588	14.500001	145000	6.589168	65892
Sub-Total			36.914397	100	1000000	45.442531	454425
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	0.476292	100	1000000	0.586327	5863
Sub-Total			0.476292	100	1000000	0.586327	5863
Total			81.233145			100	1000000

Important Note

The ppm calculations are at the **homogeneous material** level and are maximum concentration values. The ppm displayed represents the **homogeneous material** with the highest ppm for that substance. The amount (mg) calculations represent the maximum total amount of each substance within the component.
 The ppm calculations are at the **component** level and are average concentration values. The amount (mg) calculations represent the average total amount of each substance within the **component**.
[See Glossary of Terms for more details.](#)

Important Part Information

There is a remote possibility the Customer Part Number (CPN) your company uses could reference more than one TI part number. This is due to two or more users (EMSI or subcontractors) using the same CPN for different TI part numbers. If this occurs, please check your Customer Part Number and cross reference it with the TI part number seen on this page.

Product Content Methodology

[For an explanation of the methods used to determine material weights, See Product Content Methodology.](#)

Material Declaration Certificate for Semiconductor IC Packaged Products

TI certifies that the material content information provided by TI is representative and accurate to the best of their knowledge based on material information provided by its suppliers and their combination into finished IC packaged products. TI semiconductor products designated to be "Pb-free", "Green" or "RoHS Exempt" fully meets the latest EU RoHS Directive requirements along with other legislation as seen in the former JIG-101 list that has been transferred to the IEC 62474 database.

Important Information/Disclaimer

TI bases its material content information on information provided by third-party suppliers and has taken, and continues to take, reasonably diligent steps to provide any required or available information. TI may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers may consider certain information to be proprietary, and thus certain information may not be available for release by TI. The material content information is provided by TI "as is."

[For additional information, please contact TI customer support.](#)

[Signature: \(click here for a fuller statement with a signed certificate\)](#)

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 For further environmental statements, please go to www.ti.com/ecoinfo
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RoHS: Means TI semiconductor products that are compliant with the current RoHS requirement that the maximum concentration values of the ten substances listed in RoHS Annex II do not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI semiconductor products labeled as "RoHS Compliant" are suitable for use in specified lead-free processes. TI may also reference these types of semiconductor products as "Pb-Free." These TI semiconductor products are also fully compliant with GADSL and the IEC 62474 database for electronic requirements.

RoHS Exempt: Means TI semiconductor products that contain lead (Pb) above the RoHS Annex II threshold, but that fall within one of the specific RoHS exemptions noted above or documented in <http://www.ti.com/lit/pdf/szzq088>

Green: Means the content of Chlorine (Cl) and Bromine (Br)-based flame retardants meet JS709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb2O3) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.